



## PUMP DISASSEMBLY

Refer to Figure 2.

1. Lay the pump assembly on a workbench.
2. Remove the three (D) nuts and three (E) lockwashers from the two (G) and one (F) spacer rods.
3. Pull the air motor from the lower pump end until air motor piston rod is on "down" position and lower pump end rod is in "up" position.
4. Slide (A) retaining ring upward.  
NOTE: A snap ring tool is recommended for proper handling of retaining ring.
5. Slide (B) sleeve towards air motor on the air motor piston rod.
6. Remove two (C) connectors and lay air motor aside.
7. Unscrew two (G) and one (F) spacer rods only if disassembly of lower pump end is necessary.

## PUMP ASSEMBLY

Note: All threads are right hand.

1. Align Lower End Pump Rod with Air Motor Piston rod. Position air inlet of motor 200° from material outlet.
2. Position two (C) connectors in place and slide (B) sleeve over two (C) connectors.
3. Slide (A) retaining ring into groove.
4. If two (G) and one (F) spacer rods were removed in disassembly of air motor from lower pump end, screw spacer rods into lower pump end.
5. Push air motor and lower pump end together so spacer rods slide thru holes located in air motor base.
6. Secure air motor to lower pump end using three (D) nuts and (E) lockwashers.

## TROUBLE SHOOTING

### • PROBLEM

\_\_\_Cause, solution.

### • Pump will not cycle.

- \_\_\_No pressure to motor, See motor manual.
- \_\_\_Restricted return lines, clean obstruction.
- \_\_\_Damaged motor, service motor.

\_\_\_Be sure to eliminate any possible non-pump problems before suspecting pump malfunction and continuing.

### • Pump problems will typically occur in one of two areas:

1. The Air Motor Section.
2. The Lower Pump Section.

\_\_\_Determine which section is affected.

## SPACER SECTION

REF	PART NO.	DESCRIPTION
A	90102	RETAINING RING
B	90109	SLEEVE
C	90096 (2)	CONNECTOR
D	Y85-29-N (3)	HEX HEAD NUT
E	Y14-625 (3)	LOCKWASHER
F	93233-2	SPACER ROD
G	93233-1 (2)	SPACER ROD

OPTIONAL (55 GALLON) SPACER KIT (66549) IS AVAILABLE. KIT INCLUDES TWO CONNECTOR ASSEMBLIES WITH AN EXTENSION ASSEMBLIES WITH AN EXTENSION ROD (90163-1), TWO (93233-3) SPACER RODS AND ONE (93232-4) SPACER ROD.

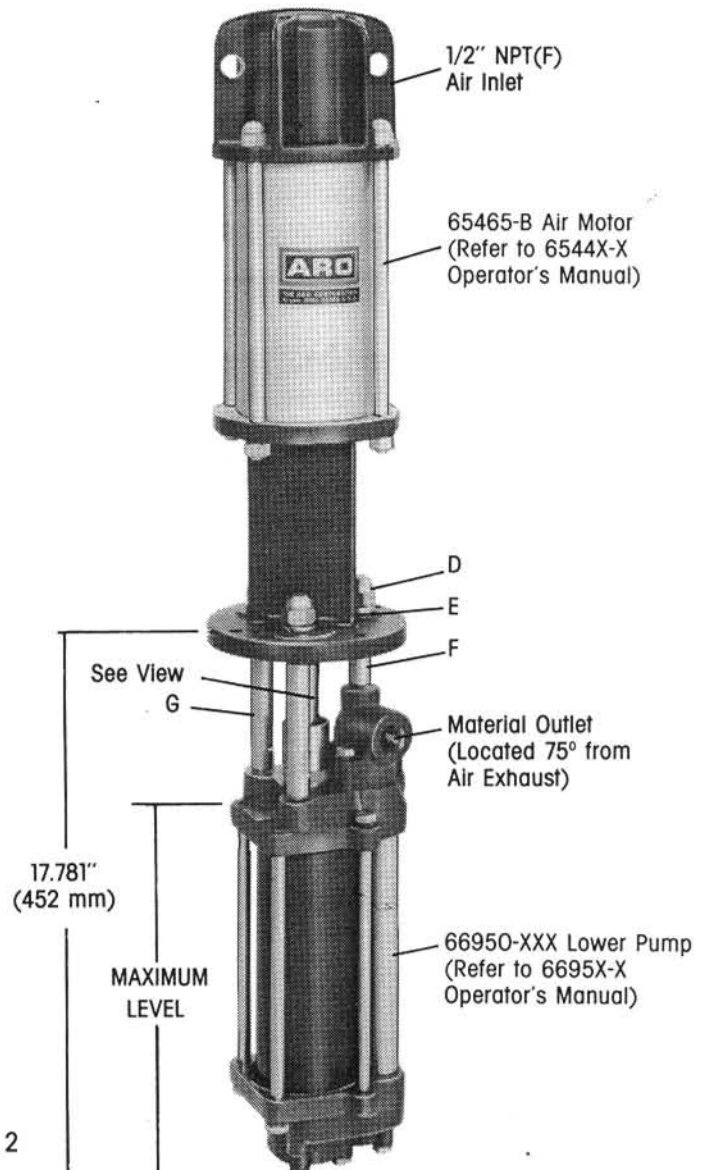
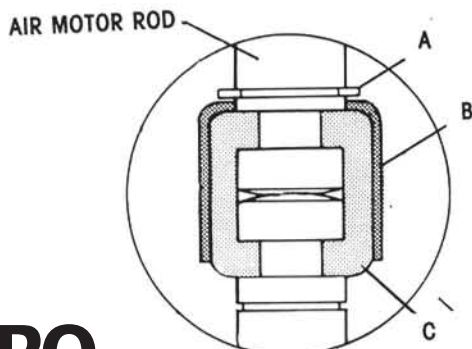


FIGURE 2

The 4-ball pump is not to be used with a stand pipe unless a special mounting is provided. Material being pumped must not be allowed to reach a level higher than the outlet casting of the lower pump end. (See maximum level). This is to keep material from coming in contact with the divorced area of the pump. This prevents material from being forced into the air motor.